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November 17, 2008

Ms. Nancy Vaughn Coombs
Chief Counsel
State Regulation of Public Utilities Review Committee
P. O. Drawer 142
Columbia, South Carolina 29202

RE: Request for Comments on Energy Issues and Policies

Dear Ms. Coombs:

Please find enclosed for filing with the State Regulation of Public Utilities Review Committee (the "PURC"), Duke Energy Carolinas, LLC's comments in response to the Committee's Request for Comments on Energy Issues and Policies, dated October 17, 2008. Additionally, Duke Energy Carolinas welcomes the opportunity to provide oral testimony at a future PURC meeting.

If you have any questions, please do not hesitate to contact me.

Sincerely,


Catherine E. Heigel

Enclosures

**DUKE ENERGY CAROLINAS' RESPONSES
TO THE STATE REGULATION OF PUBLIC UTILITIES REVIEW COMMITTEE'S
REQUEST FOR PUBLIC COMMENTS**

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1. What action do you anticipate from the U.S. Congress as to climate change legislation? What impact may this have on South Carolina?

Response: Over the next six to eight months, Duke Energy expects to see a significant amount of discussion in Congress around the state of the economy, energy independence, and climate change policy. Although Duke Energy does not expect either the United States House of Representatives or the United States Senate to take a vote on comprehensive climate change legislation in the first half of 2009, we fully expect Congressional Committees of jurisdiction in both legislative chambers to conduct hearings and possibly report out legislation for the full House or Senate to consider. This view is based on the expectation that (i) the incoming Administration will take the first several months of 2009 to get key staff and political appointees into place; and (ii) the new Administration's focus will be on dealing with the state of the nation's economy.

Energy security and climate change legislation will be priority issues for the next Administration and Congress. Duke Energy expects legislative action to ramp up in the second half of 2009 with the debate continuing into 2010. Duke Energy believes that the likelihood of climate change legislation being enacted during the 111th Congress is dependent largely on the state of the economy.

Duke Energy believes that Congress should enact legislation that begins to address the issue of global climate change. We believe this can be done with appropriate design of a comprehensive, long-term program that caps emissions, provides the right cost-control tools, and supports the development, demonstration, and deployment of new technologies so that consumers in South Carolina can continue to receive affordable and reliable electricity.

Duke Energy also believes there are some core principles that must be kept in mind as the country moves forward on climate change legislation:

Nuclear Expansion. South Carolina has taken a leadership role in advancing the next generation of nuclear power. Climate change policy must address and remove barriers associated with nuclear energy production. We cannot meet our greenhouse gas ("GHG") reduction goals without expanding the role of nuclear in this country's energy mix.

Flexibility. Legislation should recognize the successes of past environmental programs by enacting a cap that features flexibility through the inclusion of a tradable allowance market. Congress also must recognize the need to contain costs – especially to those living in areas of the country that rely on coal generation like South Carolina. Congress should not penalize past fuel choices.

Broad Coverage. The program should be established nationally, covering many sectors, resisting the urge to focus solely on the electric sector. A broad, national program is the most cost-effective approach and will set the country on a course of GHG emission reductions. Programs that focus only on one sector will fail to reach the desired emission reduction goals.

Cost Containment. Because a cap-and-trade program for GHG emissions will impact all sectors of the economy, we believe that in order to alleviate concerns over implementation costs, the program should contain provisions that ensure the actual cost of the program is in alignment with the policy maker's expectations.

Meaningful Reductions That Track Technology Development. It is important to start a cap now, and to gradually reduce that cap so that technologies have time to develop and deploy. Recognizing that it is difficult to set a course for fifty years or more, Congress should mandate periodic reviews to ensure that projected technology development and the cap trajectory are in sync.

Technology Innovation. The program must actively support the development and deployment of low-carbon base load generation technologies. Widespread availability and deployment of such technologies will be central to managing GHG emissions in the power sector without disrupting the economy. This will require substantial near-term federal financial support – the carbon price signal will not by itself be able to drive the needed technology revolution quickly enough.

Diversity in energy supply. Congress must recognize that no single energy source will address the climate change challenge and at the same time meet growing demand. We will need all five fuels – nuclear, coal, natural gas, renewables, and the “fifth fuel” – energy efficiency. We will need to use existing technologies as well as develop new ones on all fronts.

Customer Impacts. Replacing our energy infrastructure will take time and money. We did not build it overnight, and we will not replace it overnight. South Carolina consumers should not be penalized for fuel choices that were made more than forty years ago. How allowances are allocated will directly impact the cost of electricity and the prices consumers pay.

Duke Energy cannot predict with any certainty the outcome and impact climate change legislation will have on South Carolina, but what we do know is the manner in which allowances are distributed under a cap and trade program influences the potential electricity rate increases consumers in South Carolina will experience. If Congress implements a cap and trade program that requires electric utilities such as Duke Energy Carolinas to purchase, through a government

auction, all the needed allowances to run its fossil fueled power plants, electric rates will increase significantly in year one of the program. For example, if a program goes into effect in 2012 and emissions allowance are purchased at a price of \$30 a ton, then the potential rate impact for Duke Energy Carolinas' customers is estimated to be about 27%¹ in 2012.

A more effective approach to reduce GHG emissions is to follow the principles in the highly successful 1990 Clean Air Act Amendments. This legislation allocated allowances based on utilities' historical emissions. That system allowed for a transition period to protect consumers and regional economies as cleaner technologies were deployed. Under a system that allocates allowances to regulated electric utilities (local distribution companies) based on historical emissions, the benefit of allowances in regulated electricity markets is passed on to electric customers, not utilities. This will hold down price increases as utilities transition to cleaner technologies as they are commercialized.

Duke Energy will continue to expand its efforts on energy efficiency, renewables, and other clean energy sources, but the goal of climate change legislation and allowance allocations must be clear: to provide a bridge to a low carbon economy until we have the new technology we need to transform our power plant fleets.

¹ Estimated rate changes for the Carolinas (as calculated by Duke Energy) are relative to current rates and reflect average rates across all customer classes. Estimated rate changes reflect current estimates of projected future emissions, but do not reflect future capital spend.

2. Does South Carolina have governmental resources available to study, plan, or act upon current or future energy policies? Are these resources sufficient? Are these resources appropriately empowered to act? Is there any overlapping of roles?

Response: The State of South Carolina is a leader on energy issues and Duke Energy believes the state's resources are adequate to address energy policy issues. However, Duke Energy does believe that clarification of the roles and responsibilities of various state agencies will lead to greater efficiency in the development and implementation of such policies.

3. How do we use electricity in South Carolina? How is our use different from other states, with respect to amount of use and type of use? What factors drive this usage? What can we do to better use our energy resources? What demographic or other factors prohibit or inhibit our ability to be more energy efficient?

Response: The average annual residential electric energy usage per customer in Duke Energy Carolinas' South Carolina service territory in 2007 was 14,381 kWh. Residential customers in South Carolina, and in the Southeast in general, use more kWh per month than in other parts of the country². This is primarily thought to be driven by (i) the hotter, more humid weather that prompts greater use of air conditioning; and (ii) the high penetration of electric heating in South Carolina.

Duke Energy Carolinas does not have specific information on South Carolina's residential sector's use of electricity by equipment type. However, when developing the Company's long-term forecasts for both South Carolina's and North Carolina's Duke Energy service territory, we incorporate electricity use by equipment type provided to us by ITRON³ (for the South Atlantic Region).

For example, in 2007, the percentages listed below were the average electricity use shares for the U.S. and the South Atlantic.

	Year	Heating	Cooling	EWHeat*	NonHVAC**	Total
U.S. Total	2007	7%	18%	8%	68%	100%
South Atlantic	2007	8%	21%	12%	59%	100%

* EWHeat is electric water heating;

** NonHVAC is electricity use that excludes heating, cooling, and electric water heating.

Many reports indicate that it should be cost-effective for consumers to aggressively pursue energy efficiency on their own, but it often does not happen. Duke Energy Carolinas conducted customer research to determine why our customers were not taking advantage of opportunities to become more energy efficient. Our research suggests that:

- Most customers do not have the expertise, data, time, or desire to evaluate efficiency options.
- Energy generally is perceived by customers to be an abundant, low-cost, readily available commodity – much more so in the Southeast than in other parts of the country. The cost of energy is a small portion of most household or business budgets.
- Many customers believe they already have adopted simple, responsible behaviors, and they perceive energy efficiency alternatives as higher-priced, complicated, or interfering with their lifestyle and/or business.
- Most residential customers lack the capital to invest in energy efficiency. This leads to decisions based on a lower initial capital cost or prolonging an equipment replacement decision as long as possible.

² Energy Information Administration website.

³ ITRON is a consulting services company for utilities.

- Research shows most customers are minimally motivated solely by altruistic issues such as climate change or national energy independence. There are signs of an emerging social consciousness with regard to energy, but few customers are willing to pay more to participate.

These challenges naturally serve to limit customer participation in energy efficiency regardless of who develops, markets, or administers the energy efficiency programs. These challenges must be overcome to achieve widespread adoption of all cost-effective energy efficiency.

4. What types of renewable sources of energy are available in South Carolina? What is the expected cost to produce and transmit electricity from those resources?

Response: Duke Energy Carolinas' current GHG neutral generation includes nuclear generation and hydroelectric generation (small hydro, large hydro, and pumped storage hydro). The Company's Integrated Resource Plans include planned additions of the following GHG neutral or non-emitting generation: new nuclear generation and renewable technologies, such as wind, co-firing wood in existing coal fired boilers, landfill gas, solar, poultry and swine waste, biomass firing, and digester biogas firing. For example, although wind generation facilities are well-established in certain areas of the country, there is currently no significant wind generation in South Carolina. The economic and technological viability of these resources in South Carolina will be determined over time. The Company did not include any hydroelectric facilities in its new resource additions. Small-scale hydro may be viable but would not make a significant energy contribution. The feasibility of additional large scale conventional or pumped storage facilities is not known at this time.

Duke Energy Carolinas has not performed any study or issued a RFP specifically to assess renewable energy availability in South Carolina. The only study that the Company is aware of that has analyzed South Carolina's renewable energy potential is the La Capra Study, dated September 12, 2007. This study was prepared for Central Electric Power Cooperative, Inc. The study concluded that 2,361 MWs of renewable energy are technologically available in South Carolina, but that only 665 MWs of renewable energy reasonably can be expected. Duke Energy Carolinas has not conducted an independent analysis of this study.

5. What types of non-native renewable resources are available to South Carolina? What is the expected cost to transmit electricity from those resources to South Carolina?

Response: Many of the resources specified in response to Question 4 are also available outside South Carolina. In particular, there is significant potential wind generation in other regions of the country. However, much of this energy cannot be transmitted to South Carolina because of technological impediments or cost. The feasibility and cost to transmit will depend upon where the resource is located. For example, there are significant wind generating resources in Texas, such as the wind generation assets owned and operated by Duke Energy affiliate Duke Energy Generation Services, but much of Texas' generating system is not interconnected with the transmission system of the rest of the country. Significant wind generating resources also exist in the Midwest. Technically speaking, the energy could be transmitted to South Carolina, but the transport would involve several transmission providers to "wheel" the power to the state, effectively making these resources cost-prohibitive to Carolinas' consumers.

Some states have structured their renewable portfolio standards to allow utilities to comply with the standard by purchasing the environmental attributes of renewable generation (often called Renewable Energy Credits, or RECs) rather than the electricity generated by the renewable generation. The North Carolina General Assembly passed Senate Bill 3 in 2007, which created a renewable energy portfolio standard that allows utilities to meet 25% of their compliance requirements with RECs. The actual energy is sold separately from the REC. For example, a wind generator in Indiana may sell the electricity from the generator into the wholesale market but sell the REC for each kWh generated to a utility in New Jersey to meet the New Jersey renewable energy portfolio standard.

6. What programs that promote energy efficiency exist in our state? Are these programs affordable to all South Carolinians? Should they be affordable to all South Carolinians? Are energy efficiency measures a cost-effective alternative to the construction and operation of generation facilities? How should energy efficiency incentives be designed?

Response: Duke Energy is a strong advocate for energy efficiency and believes programs structured appropriately can be successful for customers, as well as utilities. Currently, Duke Energy Carolinas offers several programs that promote energy efficiency including load curtailment programs for residential and non-residential customers, residential and non-residential time-of-use rates, standby generator control, hourly pricing, Energy Star rates, and a Residential Housing Program that encourages increased energy efficiency by providing loans for heat pumps, central air conditioning systems, and energy-efficiency measures such as insulation, HVAC tune-ups, and duct sealant.

In September 2007, Duke Energy Carolinas filed new expanded energy efficiency programs with the Public Service Commission of South Carolina ("PSC") for approval in Docket No. 2007-385-E (*see below* for descriptions of the programs). If Duke Energy Carolinas' Energy Efficiency Plan is approved, the cost to its South Carolina residential customers will be less than \$1 per month. The Company believes this cost is affordable.

Energy efficiency measures can be cost-effective alternatives to the construction and operation of generation facilities. One way to measure cost-effectiveness is to compare the cost of the programs to the cost of the generation alternative. Duke Energy Carolinas screens all potential measures for cost-effectiveness and proposes cost-effective portfolios of measures for implementation.

Although South Carolina law authorizes the PSC to approve incentives for utilities to invest in and implement energy efficiency programs, there is flexibility on the type of incentive that might be approved. Duke Energy believes that in order to truly remove the natural disincentive utilities have to reduce their sales, returns for a utility's investment in energy efficiency should be on par with its investment in new generation. When designing energy efficiency programs and incentives for customers, Duke Energy Carolinas has identified the following principles:

- Customers do not want the productivity of and/or their lifestyle to be compromised
- Customers want minimal up front investment
- Customers want a quick and significant pay-off in terms of energy savings
- Customers want hassle-free solutions that are simple to understand, easy to act upon, and are convenient.

New Energy Efficiency and Demand-Side Management Programs

Below is a summary of the proposed demand response and conservation programs that the Company has proposed to implement in South Carolina in PSCSC Docket No. 2007-358-E. A hearing was held on the Company's Energy Efficiency Plan in February 2008. The Company is currently awaiting further action by the Public Service Commission.

Demand Response Programs

Power Manager

Power Manager is a residential load control program. Participants receive billing credits during the billing months of July through October in exchange for allowing Duke Energy Carolinas the right to cycle their central air conditioning systems and, additionally, to interrupt the central air conditioning when the Company has capacity needs.

Information about the Power Manager program will be provided in bill inserts and on Duke Energy Carolinas' Web site, but the program will not be actively marketed until two-way meter communication is available.

Duke Energy Carolinas has proposed to convert customers from the previous Rider LC onto this program and may add other customers who wish to participate.

PowerShare[®]

PowerShare[®] is a non-residential load curtailment program consisting of two options, an Emergency Option and a Voluntary Option. The Emergency Option customers will receive capacity credits monthly based on the amount of load they agree to curtail during utility-initiated emergency events. Customers enrolled in the Emergency Option also may be enrolled in the Voluntary Option and eligible to earn additional credits. Voluntary Option customers will be notified of pending emergency or economic events and can log on to a web site to view a posted energy price for that particular event. Customers then will have the option to nominate load for the event and will be paid the posted energy credit for load curtailed.

Duke Energy Carolinas has proposed to convert customers from the previous Rider IS and Rider SG onto this program and may add other customers who wish to participate.

Conservation Programs

Residential Energy Assessments

This program will assist residential customers in assessing their energy usage and will provide recommendations for more efficient use of energy in their homes. The program also will help identify those customers who could benefit most by investing in new demand-side management measures, undertaking more energy-efficient practices and participating in Duke Energy Carolinas' programs. The types of available energy assessments and demand-side management products are as follows:

- **Mail-in Analysis.** The customer provides information about his/her home, number of occupants, equipment, and energy usage on a mailed energy profile survey, from which Duke Energy Carolinas will perform an energy use analysis and provide a Personalized Home Energy Report including specific energy-saving recommendations.
- **Online Analysis.** The customer provides information about his/her home, number of occupants, energy usage, and equipment through an online energy profile survey. Duke Energy Carolinas will provide an Online Home Energy Audit including specific energy-saving recommendations.
- **On-site Audit and Analysis.** Duke Energy Carolinas will perform one on-site assessment of an owner-occupied home and its energy efficiency-related features during the life of this program.

Smart Saver® for Residential Customers

The Smart Saver® Program will provide incentives to residential customers who purchase energy-efficient equipment. The program has two components – compact fluorescent light bulbs (“CFLs”) and high-efficiency air conditioning equipment.

This residential compact fluorescent light bulbs incentive program will provide market incentives to customers and market support to retailers to promote use of CFLs. Special incentives to buyers and in-store support will increase demand for the products, spur store participation, and increase availability of CFLs to customers. Part of this program is to educate customers on the advantages (functionality and savings) of CFLs so that they will continue to purchase these bulbs in the future when no direct incentive is available.

The residential air conditioning program will provide incentives to customers, builders, and heating contractors (HVAC dealers) to promote the use of high-efficiency air conditioners and heat pumps with electronically-commutated fan motors. The program is designed to increase the efficiency of air conditioning systems in new homes and for replacements in existing homes.

Low Income Services

The purpose of this program is to assist low income residential customers with demand-side management measures to reduce energy usage through energy efficiency kits or through assistance in the cost of equipment or weatherization measures.

Energy Efficiency Education Program for Schools

The purpose of this program is to educate students about sources of energy and energy efficiency in homes and schools through a curriculum provided to public and private schools. This curriculum includes lesson plans, energy efficiency materials, and energy audits.

Non-Residential Energy Assessments

The purpose of this program is to assist non-residential customers in assessing their energy usage and to provide recommendations for more efficient use of energy. The program will also help

identify those customers who could benefit from other Duke Energy Carolinas' DSM non-residential programs.

The types of available energy assessments are as follows:

- **Online Analysis.** The customer provides information about its facility. Duke Energy Carolinas will provide a report including energy-saving recommendations.
- **Telephone Interview Analysis.** The customer provides information to Duke Energy Carolinas through a telephone interview, after which billing data, and, if available, load profile data, will be analyzed. Duke Energy Carolinas will provide a detailed energy analysis report with an efficiency assessment along with recommendations for energy-efficiency improvements. A 12-month usage history may be required to perform this analysis.
- **On-site Audit and Analysis.** For customers who have completed either an Online Analysis or a Telephone Interview Analysis, Duke Energy Carolinas will cover 50% of the costs of an on-site assessment. Duke Energy Carolinas will provide a detailed energy analysis report with an efficiency assessment along with recommendations, tailored to the customer's facility and operation, for energy efficiency improvements. The Company reserves the right to limit the number of off-site assessments for customers who have multiple facilities on the Duke Energy Carolinas system. Duke Energy Carolinas may provide additional engineering and analysis, if requested, and the customer agrees to pay the full cost of the additional assessment.

Smart Saver[®] for Non-Residential Customers

The purpose of this program is to encourage the installation of high-efficiency equipment in new and existing non-residential establishments. The program will provide incentive payments to offset a portion of the higher cost of energy-efficient equipment. The following types of equipment are eligible for incentives: high-efficiency lighting, high-efficiency air conditioning equipment, high-efficiency motors, and high-efficiency pumps. Customer incentives may be paid for other high-efficiency equipment as determined by the Company to be evaluated on a case-by-case basis.

Efficiency Savings Plan (Conservation)

This is a potential pilot program designed to learn about and develop a financing structure that helps customers overcome up-front capital outlays for energy efficiency equipment financing. This program will allow residential and non-residential customers to install energy efficiency products with no up-front payment. The customer would pay for these products through a tariff charge on their Duke Energy Carolinas bill. The tariff would be a utility charge that would remain with the facility, not the customer.

7. The heavy use of concrete and steel to construct coal and nuclear generating facilities in China, India, and other developing nations and the importation of fuel needed to create energy from those facilities has increased the price of these raw materials and commodities beyond most projections. Is this level of growth sustainable? Will prices continue to be driven by this global demand? How will South Carolina be affected by this global demand?

Response:

(1) Is this level of growth sustainable? No. History shows that this type of growth is not sustainable and that prices tend to revert to the mean. In fact, demand and commodity prices have retreated significantly as a result of the current global economic slowdown.

(2) Will prices continue to be driven by this global demand? Yes. As we have seen in the recent swing in commodity prices, it truly is a global economy. The United States and South Carolina are subject to global demand and prices. Recent activity in the coal markets illustrates the impact of the global demand for commodities on prices. This summer, the market prices for Central Appalachia coal to be delivered in 2008 and 2009 were at an all-time high. The market increased from the mid \$40s per ton in the summer of 2007 to \$120 to \$150 per ton by July 2008. However, since the beginning of the current economic crises, there has been a sharp decline in coal prices.

The primary reason for the dramatic increase in coal prices from 2007 to the summer of 2008 is the rapid change in global coal market conditions, particularly unanticipated world coal supply disruptions and increased world coal demand. This increased global demand resulted in heightened demand for all United States coal supply regions, particularly those that supply Duke Energy Carolinas. After a period of stable Eastern coal prices over the previous two years, domestic coal prices were impacted by growing demand and supply issues in China, Australia, South Africa, and Europe. As more coal power plants are built in South Africa and Asia, more of these countries' coal production will be used for domestic consumption rather than for export. The result of these changing world supply and demand conditions is the increase in United States coal exports by 35 million tons between 2006 and 2008.

Central Appalachia coal prices are currently at \$85 to \$90 per ton. The weakening global economic conditions have led to slowing demand for steam coal used by utilities and for metallurgical coal used by steel companies.

(3) How will South Carolina be affected by this global demand? Because South Carolina operates in a global economy, it will continue to be affected by global demand and will be subject to price swings in either direction. As illustrated by the increasing global demand for coal, South Carolinians feel the impact of these market forces through higher fuel charges that electric utilities pass through to their customers.

8. How has the current economic situation affected the projections for energy use?

Response: The current economic situation has put downward pressure on the projection of sales in the short term. Because the economy is in such a state of flux and uncertainty due to unprecedented economic events, the forecast of sales has become more difficult to predict.